SEQUENCE LISTING <110> Société des Produits Nestlé S.A. <120> The Lactose operon of Lactobacillus delbrueckii and its use for controlling gene transcription and/or expression in bacterial cells <130> 112843-039 <140> PCT/EP00/05834 2000-06-23 <141> <150> 99112471.0 <151> 1999-06-30 <160> 34 <170> PatentIn version 3.2 <210> <211> 1435 <212> <213> Lactobacillus delbrueckii <400> 1 60 gaattttgtc tggatgctca ggaagcccgc cagctcaagc tggtgattca gccacttttt 120 actgaataat gctacaattg acttaacagc ataaaatttt agtaaaagcg agtgaagaag 180 atggcaacga tcagagaagt ggccaaggca gccggcgtgt cgccagcgac ggtttcccgg gtcttgaact atgaccagac cctgtcggtc aatgaggcaa cgcggcagaa gatattcaaa 240 actgctgaag ccatgcacta ccataagagc cggaagacca gaaagagcaa gcaaaagcgc 300 360 ctqqcqatct gcctqtqgtq tgaccaagac caggagatca aggacctcta ttactattca atcaqaacca qcqcqcaaqc aqaqqccaaq aagcagggac ttgaaagcca ggtcatttat 420 ccgqctgatc ctttqcccqa tccaqctqct ttaaqcqqqa ttatcatqat tqqctaccaq 480 cagtattcgc cagaccgctt gaatgaagtc aaaaagtctg gcctgcccct ggtctttgtc 540 gatactgaca ccttaaaatt gggttactgc tcagttgtgg ctgactttgg ccaggccatq 600 caggaggege tagaggtett etgggggeag ggeagggage ggategeet tttggatggt 660 gatttggaca gtaattttga taaaaacaac ttggtcgact tccgcttccg cgattataag 720 aagagcctcg cggcccgcgg ccagtacgac ccggacttag tctatgttgg aaacttcact 780 840 ccgcaatctg gctatgaagc cattaaagaa gctcttaagt ccggctcctt cccgaaagcc 900 ttgattgcgg ctaatgacgc catggctatt ggagcattga aggcctttaa agaagctgga attaaagtcc cagaggacgt cagtctgatt tcttttaatg acacaacggc agcagaattt 960 1020 qccaacccaq ccttqactaq cgtacatgta qagacccagc agatggqccg agccagcgtc 1080 aagqtcatqa aagacctgct ggatgatgat gaagccggca cttacaaggt cactttccca 1140 acaaaactcg tttaccggga atcttgccca aaagcataag ggcatagagc ataataacag caaagaaata gcttggagat tgattttctc caagctattt ttcgtatata ttatggctgc 1200 attctqttga tcattcttgg gaatgggaca gcttcacgaa cgtggtccag cttgcagatc 1260 caggcaatga cccqttcaaa qcccatcccq aagccqqaqt qcgqcacgtq ccqtactttt 1320 ctcagggtcc caggtaccca ggagtagtcg tcccagggtt gaggcccqct tcttcqattt 1380

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1435

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Lys Ser Arg Lys Thr Arg Lys Ser Lys Gln Lys Arg Leu Ala Ile Cys 50 55 60

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Ile Arg Thr Ser Ala Gl<br/>n Ala Glu Ala Lys Lys Gl<br/>n Gly Leu Glu Ser 85 90 95

Gln Val Ile Tyr Pro Ala Asp Pro Leu Pro Asp Pro Ala Ala Leu Ser 100 105 110

Gly Ile Ile Met Ile Gly Tyr Gln Gln Tyr Ser Pro Asp Asp Leu Asn  $115 \hspace{1.5cm} 120 \hspace{1.5cm} 125$ 

Glu Val Lys Lys Ser Gly Leu Pro Leu Val Phe Val Asp Thr Asp Thr 130 135 140

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Gln Glu Ala Leu Glu Val Phe Trp Gly Gln Gly Arg Glu Arg Ile Ala 165 170 175

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| <210><211><211><212><213>        | 98  |          |
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| <210><br><211><br><212><br><213> | 106   |                |           |
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